## EMPLOYER SAMPLE PROCEDURES FOR HEAT ILLNESS PREVENTION



**FEB 2010** 



California Employers with any outdoor places of employment must comply with the Heat Illness Prevention Standard T8 CCR 3395. These procedures have been created to assist the employer in crafting their heat illness prevention procedures, and to reduce the risk of work related heat illnesses among their employees.

These procedures are not intended to supersede or replace the application of any other Title 8 regulation, particularly T8 3203 Injury and Illness Prevention Program (IIPP). Title 8 CCR 3203 requires an employer to establish, implement, and maintain an effective IIPP. The measures listed here may be integrated into the Employer's Injury and Illness Prevention Program.

The employer must also be aware that other standards apply to Heat Illness Prevention such as the requirement to provide for drinking water, first aid and emergency response.

<u>Please note:</u> These procedures provide the minimal steps applicable to most outdoor work settings and are essential to reducing the incidence of heat related illnesses. In working environments with a higher risk for heat illness (e.g., during a heat wave, or other severe working or environmental conditions), it is the employer's duty to exercise greater caution and additional protective measures beyond what is listed in this document, as needed to protect their employees.

To effectively establish your company procedures, carefully review the key elements listed on this document, as well as the examples provided, then select and fill out the procedures applicable to your workplace. Please use additional paper when necessary. Implement and train employees and supervisors on your company procedures and follow-up to ensure your procedures are fulfilled.

Furthermore, to successfully tailor these procedures to your work activities, evaluate and consider the individual conditions present at your site (such as, but not limited to): (1) size of the crew, (2) the length of the work-shift, (3) the ambient temperature (which can be taken either with the aid of a simple thermometer or by monitoring the weather) and (4) the presence of personal protective equipment or additional sources of heat. Again, these sample procedures do not include every workplace scenario, so it is crucial that your company evaluate and take into account conditions found in your individual workplace that are likely to cause a heat illness.

## Your written procedures should also:

- 1. Identify the designated person(s) that has been assigned the applicable task(s) (e.g. supervisor, foreman, safety coordinator, crew leader).
- 2. Provide specific details required to carry out the task and ensure that the task is accomplished successfully (e.g. how many water containers/shade structures, of what size, distance to placement, frequency of water-level replenishment/weather-tracking/water breaks/reminders, etc). [For additional information, see the Enforcement Q&A: <a href="http://www.dir.ca.gov/DOSH/heatIllnessQA.html">http://www.dir.ca.gov/DOSH/heatIllnessQA.html</a>]
- 3. Specify how these procedures will be communicated to your employees and in particular to the persons assigned these responsibilities (e.g. via training, meeting), and how it will be ascertained that these company instructions and procedures are followed.

## Sample Procedures for <u>Provision of Water</u> include but are not limited to the following:

The [ $designated\ person$ ] will bring [ $XX\ No.\ of$ ] drinking water containers (of 5 to 10 gallons each) to the site, so that at least 2 quarts per employee are available at the start of the shift.
The [ designated person ] will bring [ XX No. of ] paper cone rims or bags of disposable cups and the necessary cup dispensers to ensure that enough disposable cups are made available for each worker and are kept clean until used.
As part of [ XYZ's Company's ] Effective Replenishment Procedures, the [ designated person ] will check the water level of all containers every [ 30 min ], and more frequently when the temperature exceeds 90°F. When the water level within a container drops below 50%, water containers will be refilled with cool water. To accomplish this task, the [ designated person ] will carry [ 1-2 ] additional water containers (i.e. 5 gallon bottles) to replace water as needed.
When the temperature exceeds 90 degrees, the [ designated person ] will carry ice in separate containers, so that when necessary, it will be added to the drinking water to keep it cool.
The [ designated person ] will check the work site and place the water as close as possible to the workers (i.e. no more than [ 50 ] feet from the workers). If field terrain prevents the water from being placed as close as possible to the workers, the [ designated person ] will bring bottled water or individual containers (in addition to disposable cups and water containers), so that workers can have drinking water readily accessible.
The [ designated person ] will ensure that the water containers are relocated to follow along as the crew moves, so drinking water will be readily accessible.
The [ designated person ] will be responsible for cleaning the water containers and ensuring that they are kept in sanitary condition (all necessary cleaning supplies are provided by the company).
The company will reimburse the supervisors for any cost incurred for them to fill up their water containers as needed on a daily basis or to purchase necessary disposable cups or cleaning supplies. The [ designated person ] will be given a per diem of [ XXX ] per week for the purchase of water and/or drinking water supplies.
The [ designated person ] will point out daily the location of the water coolers to the workers and remind them to drink water frequently. When the temperature exceeds or is expected to exceed 90 degrees F, the [ designated person ] will hold a brief 'tailgate' meeting each morning to review with employees the importance of drinking water, the number and schedule of water and rest breaks and the signs and symptoms of heat illness.
The [ designated person ] will use audible devices (such as whistles or air horns) to remind employees to drink water.

	When the temperature equals or exceeds 95 °F or during a heat wave, the [ designated person ] will increase the number of water breaks, and will remind workers throughout the work shift to drink water		
	During employee training, the importance of frequent drinking of water will be stressed.		
Sampl follow	e <u>Procedures for Access to Shade</u> include but are not limited to the ing:		
Note: Follow the general guidance provided above, under the Provisions for Water (identify the person assigned the task and list the specific tasks that have to be carried out).			
	Each [ designated person ] will bring [ XX No. of ] shade structures to the site, to accommodate at least 25 percent of the employees on the shift and either chairs, benches, sheets, towels or any other items to allow employees to sit and rest without contacting the bare ground. However, chairs, benches, etc. are not required for acceptable sources of shade such as trees.		
	The [ designated person ] will ensure that [ XX No. of ] shade structures are opened and placed as close as practical to the workers, when the temperature equals or exceeds 85°F. When the temperature is below 85°F, the shade structures will be brought to the site, but will be opened and set in place upon worker(s) request. Note: The interior of a vehicle may not be used to provide shade unless the vehicle is air-conditioned and the air conditioner is on.		
	The [ designated person ] will point out the daily location of the shade structures to the workers as well as allow and encourage employees to take a 5 min cool-down rest in the shade, when they feel the need to do so to protect themselves from overheating.		
	The [ designated person ] will ensure that the shade structures are relocated to follow along with the crew and double-check that they are as close as practical to the employees, so that access to shade is provided at all times.		
	In situations where trees or other vegetation are used to provide shade (such as in orchards), the [ designated person ] will evaluate the thickness and shape of the shaded area (given the changing angles of the sun during the entire shift), before assuming that sufficient shadow is being cast to protect employees.		
	In situations where it is not safe to provide shade (example winds of more than 40 mph), the [ designated person ] will document how this determination was made, and what steps will be taken to provide shade upon request.		
	For non-agricultural employers, in situations where it is not safe or feasible to provide shade, the [ designated person ] will document how this determination was made, and what steps will be taken to provide shade upon request or other alternative cooling measures with equivalent protection.		
Sample Procedures for Monitoring the Weather include but are not limited to:			
	2 weeks in advance (or with as many days in advance as possible), the <a href="Employer">Employer</a> , Farm Labor <a href="Contractor or Superintendent">Contractor or Superintendent</a> will go on the internet ( <a href="www.nws.nooa.gov">www.nws.nooa.gov</a> ), call the National Weather Service Phone Numbers (see CA numbers attached) or check the Weather Channel TV Network to view the extended weather forecast in order to plan in advance the work schedule, know whether a heat wave is expected and if additional schedule modifications will be necessary. This type of advance planning should take place all summer long.		

**CALIFORNIA Dial-A-Forecast** 

Eureka 707-443-7062 Hanford 559-584-8047 Los Angeles 805-988-6610(#1) Sacramento 916-979-3051 San Diego 858-297-2107(#1) San Francisco 831-656-1725(#1)

	Prior to each workday, the [ designated person ] will review the forecasted temperature and humidity for the worksite and compare it against the National Weather service Heat Index to evaluate the risk level for heat illness, for instance whether or not workers will be exposed at a temperature and humidity characterized as either "extreme caution" or "extreme danger" for heat illnesses such as heat stroke. It is important to keep in mind that the temperature at which these warnings occur must be lowered as much as 15 degrees if the workers under consideration are in direct sunlight.				
_	Prior to each workday, the [ designated person ] will be responsible for monitoring the weather (using <a href="www.nws.nooa.gov">www.nws.nooa.gov</a> or with the aid of a simple thermometer) at the worksite. This critical weather information will be taken into consideration, to determine when it will be necessary to make modifications to the work schedule (such as stopping work early, rescheduling the job, working at night or during the cooler hours of the day, increasing the number of water and rest breaks).				
	The [ designated person ] will be responsible for using a thermometer at the jobsite and checking the temperature every [ 60 mins ] to monitor for sudden increases in temperature, to ensure that once the temperature exceeds 85 °F, the shade structures are opened and accessible to the workers and to make certain that once the temperature equals or exceeds 95 °F additional preventive measures such as the High Heat Procedures are implemented.				
Handl	Handling a Heat Wave:				
	During a heat wave or heat spike (e.g., a sudden increase in daytime temperature of 9 degrees or more), the work day will be cut short (example 12 PM), will be rescheduled (example conducted at night or during cooler hours) or if possible cease for the day.				
	If schedule modifications are not possible and workers have to work during a heat wave, the [ designated person ] will provide a tailgate meeting to reinforce heat illness prevention with emergency response procedures and review the weather forecast with the workers. In addition, the [ designated person ] will institute alternative preventive measures such as provide workers with an increase number of water and rest breaks every [ (X) hour ], supervise workers to ensure that they do stop work and take these breaks, and observe closely all workers for signs and symptoms of heat illness.				
	During a heat wave or heat spike (e.g., a sudden increase in daytime temperature of 9 degrees or more), and the start of the workday, the [ designated person ] will hold a tailgate meeting with the workers to review the company heat illness prevention procedures, the weather forecast and emergency response.				
	The [ designated person ] will assign each employee a "buddy" to be on the lookout for signs and symptoms of heat illness and ensure that emergency procedures are initiated when someone displays possible signs or symptoms of heat illness.				
Sample <u>High Heat Procedures</u> include but are not limited to: [High Heat Procedures are additional preventive measures that this company will use when the temperature equals or exceeds 95 degrees Fahrenheit].					
	The [ designated person ] will ensure that effective communication by voice, observation, or electronic means is maintained so that employees at the worksite can contact a supervisor when necessary. If the [ designated person ] is unable to be near the workers to observe them or communicate with them, then an electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.				
	The [ designated person ] will observe employees for alertness and signs and symptoms of heat illness.				
	The [ designated person ] will remind employees throughout the work shift to drink plenty of water.				
	The [ designated person ] will closely supervise a new employee, or assign a "buddy" or more				

experienced coworker for the first 14 days of the employee's employment by the employer, unless the employee indicates at the time of hire that he or she has been doing similar outdoor work for at least 10 of the past 30 days for 4 or more hours per day.

## Sample Procedures for Acclimatization include but are not limited to:

Acclimatization is the temporary and gradual physiological change in the body that occurs when the environmentally induced heat load to which the body is accustomed is significantly and suddenly exceeded by sudden environmental changes. In more common terms, the body needs time to adapt when temperatures rise suddenly, and an employee risks heat illness by not taking it easy when a heat wave strikes or when starting a new job that exposes the employee to heat to which the employee's body hasn't yet adjusted.

Inadequate acclimatization can imperil anyone exposed to conditions of heat and physical stress significantly more intense than what they are used to. Employers are responsible for the working conditions of their employees, and they must act effectively when conditions result in sudden exposure to heat their employees are not used to.

	[ XYZ's Company's ] will monitor the weather and in particular be on the look out for sudden heat wave(s), or increases in temperatures to which employees haven't been exposed to for several weeks or longer.
	During a heat wave or heat spike (e.g., a sudden increase in daytime temperature of 9 degrees or more), the work day will be cut short (example 12 PM), will be rescheduled (example conducted at night or during cooler hours) or if possible cease for the day.
	During the hot summer months, the work shift will start [ $(X)$ hour ] earlier in the day or later in the evening.
	For new employees, the [ designated person ] will try to find ways to lessen the intensity of the employees work during a two-week break-in period (such as scheduling slower paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day (early-morning or evening)). Steps taken to lessen the intensity of the workload for new employees will be documented.
	The [ designated person ] will be extra-vigilant with new employees and stay alert to the presence of heat related symptoms.
	The [ designated person ] will assign new employees a "buddy" or experienced coworker to watch each other closely for discomfort or symptoms of heat illness.
	During a heat wave, the [ designated person ] will observe all employees closely (or maintain frequent communication via phone or radio) and be on the look out for possible symptoms of heat illness.
	[ XYZ's Company's ] training for employees and supervisors will include the importance of acclimatization, how it is developed and how these company procedures address it.
Samp	le <u>Procedures for Emergency Response</u> include but are not limited to:
	Prior to assigning a crew to a particular worksite, the [ designated person ] will provide workers and the foreman a map along with clear and precise directions (such as streets or road names, distinguishing features and distances to major roads) of the site, to avoid a delay of emergency medical services.

Ш	Prior to assigning a crew to a particular worksite, the [ designated person ] will ensure that a qualified, appropriately trained and equipped person will be available at the site, to render first aid if necessary.		
	Prior to the start of the shift, the [ designated person ] will determine if a language barrier is present at the site and take steps (such as assigning the responsibility to call emergency medical services to the foreman or an English speaking worker) to ensure that emergency medical services can be immediately called in the event of an emergency.		
	All foremen and supervisors will carry cell phones or other means of communication, to ensure that emergency medical services can be called and check that these are functional at the worksite prior to each shift.		
	When an employee is showing symptoms of possible heat illness, [ designated person ] will take immediate steps to keep the stricken employee cool and comfortable once emergency service responders have been called (to reduce the progression to more serious illness).		
	At remote locations such as rural farms, lots or undeveloped areas, the [ designated person ] will designate an employee or employees to physically go to the nearest road or highway where emergency responders can see them. If daylight is diminished, the designated employee(s) shall be given reflective vest or flashlights in order to direct emergency personnel to the location of the worksite, which may not be visible form the road or highway.		
	During a heat wave or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any signs or symptoms they are experiencing.		
	[ XYZ's Company's ] training for employees and supervisors will include every detail of these written emergency procedures.		
Handling a Sick Employee:			
	When an employee displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will check the sick employee and determine whether resting in the shade and drinking cool water will suffice or if emergency service providers will need to be called. Do not leave a sick worker alone in the shade, as he or she can take a turn for the worse!		
	When an employee displays possible signs or symptoms of heat illness and no trained first aid worker or supervisor is available at the site, call emergency service providers.		
	Call emergency service providers immediately if an employee displays signs or symptoms of heat illness (loss of consciousness, incoherent speech, convulsions, red and hot face), does not look OK or does not get better after drinking cool water and resting in the shade. While the ambulance is in route, initiate first aid (cool the worker: place in the shade, remove excess layers of clothing, place ice pack in the armpits and join area and fan the victim). Do not let a sick worker leave the site, as they can get lost or die (when not being transported by ambulance and treatment has not been started by paramedics) before reaching a hospital!		
	If an employee does not look OK and displays signs or symptoms of severe heat illness ( <u>loss of consciousness</u> , <u>incoherent speech</u> , <u>convulsions</u> , <u>red and hot face</u> ), and the worksite is located more than 20 min away from a hospital, call emergency service providers, communicate the signs and symptoms of the victim and request Air Ambulance.		

Sample Procedures for Employee and Supervisory Training include but are not limited to:		
	[ XYZ's Company's ] will ensure that all supervisors are trained prior to being assigned to supervise other workers. Training will include this company's written procedures and what steps supervisors will follow when employees' exhibit symptoms consisted with heat illness.	
	[ XYZ's Company's ] will ensure that all employees and supervisors are trained prior to working outside. Training will include the company's written prevention procedures.	
	[ designated person ] will train employees on the steps that will be followed for contacting emergency medical services, including how they are to proceed when there are non-English speaking workers, how clear and precise directions to the site will be provided as well as stress the need to make visual contact with emergency responders at the nearest road or landmark to direct them to their worksite.	
	When the temperature exceeds 75 degrees °F, the [ designated person ] will hold short 'tailgate' meetings to review the weather report, reinforce heat illness prevention with all workers and provide reminders to drink water frequently, to be on the lookout for signs and symptoms of heat illness and inform them that shade can be made available upon request.	

The [ designated person ] will assign new employees a "buddy" or experienced coworker to ensure

that they understood the training and follow company procedures.